

Physics ECAT Pre Engineering Chapter 19 Dawn of Modern Physics

Sr	Questions	Answers Choice
1	If you are moving at relativistic speed between two points that are a fixed distance apart, then the distance between the two points appears	A. larger B. shorter C. equal D. none of these
2	According to Einstein, with the great increase in the speed of the body the relativistic length of the body	A. Remains constant B. Decreases C. Increases D. Reduces to zero
3	When a platinum wire is heated, it appears yellow at	A. 1600°C B. 900°C C. 1100°C D. 1300°C
4	Compton studied the scattering of x-rays by loosely bound electrons from:	A. NaCl crystal B. Graphite crystal C. Zirconia D. Copper crystal E. None of these
5	The inside cavity of the black body is	A. painted white B. painted silver C. blackened with soot D. painted red
6	The value of the plank's constant 'h' is given by	A. 1.6×10^{-19} J B. 1.67×10^{-27} Kg C. 6.63×10^{34} Js D. 6.63×10^{-34} Js
7	According to Einstein, with the great increase in the speed of the body, the relativistic mass of the body	A. Remains constant B. Decreases C. Increases to infinity D. Reduced to zero
8	The special theory of relatively treats the problems involving:	A. Inertial frames of reference B. Non-inertial frames C. Non-accelerated frame D. Both (A) and (C) E. Both (B) and (C)
9	The value of the Stephen's constant for black body radiations is given by	A. 5.6×10^8 Wm ⁻² K ⁻⁴ B. 5.67×10^{-8} Wm ⁻² K ⁻⁴ C. 2.9×10^{-3} mK D. 2.9×10^3 mK
10	When a platinum wire is heated, it appears orange red at	A. 500°C B. 900°C C. 1100°C D. 1300°C
11	Max plank received the Nobel Prize in physics for his discovery of energy quanta in	A. 1900 B. 1906 C. 1912 D. 1918
12	The threshold frequency of sodium is 6×10^6 MHz. The cut-off wavelength for this metal will be	A. 500 m B. 500 nm C. 500 km D. 500 cm E. None of these
13	Max plank founded a mathematical model resulting in an equation that describes the shape	A. 1890 B. 1895 C. 1898 D. 1900

	of observed black body radiation curves exactly, in	C. 1900 D. 1905
14	Compton shift refers to:	A. Photon B. Meson C. Proton D. Positron E. Both (B) and (D)
15	S.I. unit of planks constant is	A. $\text{J}\cdot\text{s}^{-1}$ B. $\text{J}\cdot\text{s}$ C. $\text{J}\cdot\text{s}^{-2}$ D. $\text{J}\cdot\text{s}^2$
16	As compared to the distance measured by an observer on Earth, the distance from Earth to a star measured by an observer in a moving spaceship would seem:	A. Smaller B. Lerger C. Same D. Much larger E. None of these
17	Wave nature of particle was proposed by	A. Einstein B. Plank C. De-Brogile D. Max well
18	As the light shines on the metal surface, the electrons are ejected	A. slowly B. instantaneously C. either of these D. none of these
19	In process of annihilation of matter, the two photons produced move in opposite direction to converse	A. momentum B. charge C. energy D. mass
20	the symbol to be used in relativity problems denotes:	A. Dilated time B. Proper time C. Life time D. Half time E. None of these